

Application No.: 09/877,645

Applicant : CABEDO-DESLIERRES et al.

Examiner : Shay L. Balsis

Art Unit : 1744

b) Amendment to the Claims

Following the contents of the Examiner's Official Action regarding the Patent Application under reference, the Applicants are respectfully re-submitting the respective Claims - without adding any new matter or amendment of inventorship - under the format of four (4) Independent Claims and their respective dependent Claims, as follows:

Independent Claim 1 - Elected . Wording was corrected, no new material added.

Dependent Claims 1 a. through 1 d. - Corrected these Dependent Claims identification that were previously #2 through #5.

No new material added.

Amended and deleted some words for clarification.

Independent Claim 2 - Corrected wording and Independent Claim Number (now #2, was previously #6).

Dependent Claims 2a through 2c - Corrected these Dependent Claims identification that were previously #7 through #9.

No new material added.

Amended and deleted some words for clarification.

Independent Claim 3 - Corrected wording and Independent Claim Number (now #3, was previously #10).

Dependent Claims 3a through 3b - Corrected these Dependent Claims identification that were previously #11 and #12.

No new material added.

Amended and deleted some words for clarification.

Independent Claim 4 - Corrected wording and Independent Claim Number (now #4, was previously #13).

Dependent Claims 4a through 4c - Corrected these Dependent Claims identification that were previously #14 through #16.

No new material added.

Amended and deleted some words for clarification.

In case the corrections produced are not technically adequate, the Applicants respectfully request the Examiner's help to re-write such claims, pursuant to MPEP 707.07(j) .

Respectfully submitted,



Maria R. Cabedo-Deslierres

CLAIMS

We claim :

1. A toothbrush comprising a conventional family of bristles at one end for brushing the teeth, and a handle at the other end for grasping the said toothbrush, and contained therein an interdental hard brush, a periodontal gum massager and stimulator tip, and any other combination of dental tools, thus providing multiple dental tools in one assemblage,
 - a. said ~~the~~ gum massager and said stimulator tip ~~of Claim 1~~ are contained in a recess beneath ~~the~~ said toothbrush bristles and is extended and retracted into ~~the~~ said toothbrush recess by longitudinal movement of a button that is guided in a slot in said handle that controls the travel limits of the movement,
 - b. said ~~The button of Claim 1~~ is keyed to a slider that moves longitudinally in an internal chamber within the said toothbrush handle and contains an internal extension tube at one end that extends through ~~the~~ said internal recess chamber in ~~the~~ said toothbrush and contains at the opposite end from ~~the~~ said slider a socket for insertion, capturing and holding ~~the~~ said gum massager and said stimulator tip,
 - c. said ~~The~~ interdental hard brush ~~of Claim 1~~ is contained in said internal chamber within ~~the~~ said toothbrush handle, and is extended and retracted into ~~the~~ said toothbrush handle chamber by longitudinal movement of ~~a~~ said button that is guided in a said slot in the said handle that controls the said travel limits of the movement, and ~~the~~ said button is keyed to ~~a~~ said slider that moves longitudinally in ~~the~~ said chamber within ~~the~~ said handle, and ~~the~~ said slider contains an extension tube at one end, that extends out of ~~the~~ said chamber, in ~~the~~ said ~~tube~~ handle and contains, at the opposite end from ~~the~~ said slider, a socket for insertion, capturing and holding ~~the~~ said internal hard brush or similar components,

- d. ~~said The~~ gum massager and ~~said~~ stimulator tip as well as ~~the said~~ interdental hard brush ~~of Claim 1~~ can be interchanged within each ~~said~~ internal chamber of the ~~said~~ handle and ~~the said~~ recess beneath ~~the said~~ toothbrush bristles,
2. ~~said A~~ toothbrush comprising ~~a said~~ traditional family of bristles at one end, for brushing the teeth, and ~~a said~~ handle, at the other end, with two parallel hollow cylinders for grasping ~~the said~~ toothbrush and containing ~~said an~~ interdental hard brush, ~~and a said~~ gum tissue massager and stimulator tip, and any other combination of dental tools, thus providing multiple dental tools in one assemblage,
- a. ~~said The~~ gum massager and stimulator tip, ~~as well as the and said~~ interdental hard brush ~~of Claim 6~~ are each contained in ~~the~~ said two parallel handle hollow cylinders and ~~they the gum massage and stimulator tip as well as the interdental hard brush~~ are extended and retracted into the said parallel handle cylinders by longitudinal movement of ~~a said~~ button that is guided in ~~a~~ ~~said~~ slot in ~~the said~~ handle that controls ~~the said~~ travel limits of the movement,
- b. ~~said The~~ button ~~of Claim 7~~ is keyed to ~~a said~~ slider that moves longitudinally inside ~~the said~~ hollow cylinders within the said handle and contains an extension tube at one end that extends out of the end of ~~the said~~ parallel cylinders and contains at the outward end from ~~the~~ said slider a socket for insertion, capturing and holding the said interdental hard brush, ~~and said~~ gum massager and stimulator tip, and ~~the said~~ socket in the end of ~~the~~ ~~said~~ extension tube contains a slit in the tube sidewalls to permit ~~the said~~ tube to expand larger for entry of the stem on ~~the said~~ dental accessory having a diametrical tapered undercut to match the inside envelope of ~~the~~ ~~said~~ slit in ~~said~~ sidewalls of ~~the said~~ extension tube,

- c. ~~The~~ said parallel hollow cylinders openings ~~of Claim 6~~ contain close-out caps to protect ~~the said~~ retracted interdental hard brush and ~~the said~~ gum massager and stimulator tip from damage and contamination, and ~~the said~~ close-out caps can be rotated open to permit extension of ~~the said~~ interdental hard brush and ~~the said~~ gum massager and stimulator tip by movement of ~~the said~~ button to extend either tool which in turn pushes open ~~the said~~ close-out cap and which in turn can be rotated back into ~~the said~~ end of ~~the said~~ handle hollow cylinders to seal them after use and cleaning of ~~the said~~ tools for dental care purposes,
3. ~~A~~ said toothbrush comprising a said conventional family of bristles at one end, for brushing the teeth, and ~~the said~~ handle at the other end, for grasping ~~the said~~ toothbrush, and providing two covered recess chambers in ~~the said~~ handle containing ~~an said~~ interdental hard brush and ~~a said~~ gum massager and ~~applicator~~ stimulator tip, and any other combination of dental tools, that can be rotated out of ~~the said~~ chambers to a level position with ~~the said~~ handle, thus providing multiple dental tools in one assemblage,
- a. ~~The~~ said internal sidewalls of ~~the said~~ recess chambers ~~of Claim 10~~ contain on ~~their~~ topside edge longitudinal grooves for insertion of a cover that slides down each groove to close out the recesses over ~~the said~~ interdental hard brush and ~~the said~~ gum massager and stimulator tip and ~~these said~~ recess chambers in ~~the said~~ handle can be positioned on any side of ~~the said~~ handle and ~~the said~~ covers contain on their upper outside surface a series of indent serrations for use to aid in movement of each of ~~the said~~ covers as they slide down the said longitudinal grooves in the sidewalls of ~~the said~~ recess chamber,

b. ~~said The~~ interdental hard brush and ~~the said~~ gum tissue massager and stimulator tip ~~of Claim 11~~ are each attached to an extension tube that is in turn attached to a Tee-shaped support arm with an enlarged cross member having two projecting pins that operate as an axle that locate and engage in a mating hole located in ~~the said~~ sidewall of ~~the said~~ recess that they are contained in and each said dental tool can be rotated around ~~the said~~ cross member's pivot axis provided by ~~the~~ said axle that is installed in each said recess chamber independently of each other and ~~the said~~ rotation permits each to be positioned horizontally in line with ~~the said~~ handle in this rotated extended position ready for use and ~~the said~~ cross member ~~of Claim 10~~ is curved on one side to permit it to rotate and clear the walls of ~~the said~~ recess they are installed in, and when rotated to the horizontal position, one surface of ~~the said~~ cross member provides a means for letting ~~the~~ said cover to slide over ~~the~~ said cross member and locks it in the horizontal position,

4. said ~~A~~ toothbrush whose said handle contains two threaded sleeves that when rotated thread out of the end of ~~the said~~ handle, ~~on~~ said interdental hard brush, ~~and~~ ~~a~~ said gum massager and stimulator tip, and any other combination of dental tools, thus providing multiple dental tools in one assemblage,

a. said ~~The~~ threaded sleeves ~~of Claim 13~~, when rotated, screw in and out a shaft that is threaded, and ~~the said~~ shaft contains at one end an extension tube with an internal socket that holds ~~the said~~ interdental hard brush and ~~the said~~ gum massager and stimulator tip, and ~~the said~~ threaded sleeves ~~of Claim 13~~ ~~that~~ contain external serrations to aid the user in their rotation for extension or retraction of ~~the said~~ interdental hard brush or ~~the said~~ gum massager and stimulator tip in and out of ~~the said~~ handle,

- b. ~~said The~~ body of ~~the said~~ toothbrush handle ~~of Claim 14~~ is comprised of three chambers, a forward, ~~and~~ an aft enclosed chambers and an open center chamber that captures ~~the said~~ two threaded sleeves and provides access to them for rotating them to screw in and out the internal threaded shafts with extension tubes that hold ~~the said~~ interdental tools,
- c. ~~said The~~ handle ~~of Claim 14~~ contains ~~said~~ close-out caps that protect ~~the said~~ enclosed tools from damage and contamination due to handling and storage of ~~the said~~ toothbrush.
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